

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

In the drawings

Revised Fig. 6 is shown in the "Replacement Sheet" of drawing appended herewith. Fig. 6 has been revised to include a reference number 817 indicating the curvilinear bottom end 817 of the tubular member, and a reference number 511 indicating the bottom section aperture 511 defined in the curvilinear bottom end 817 of the tubular member.

Objections to the specification

The specification is presently objected to. In particular, the examiner notes that the title of the invention is not descriptive. The title has been changed according to the examiner's suggestion. Accordingly, withdrawal of the objection is requested.

The specification is further amended in the interest of improved clarity, and for consistency with the presently amended claims. Also, the specification is amended to refer to the reference number 817 added to Fig. 6. No new matter is added.

Rejection of claims 1-6 under 35 U.S.C. § 112, second paragraph

Claims 1-6 presently stand rejected as being indefinite. Applicant appreciates the examiner's identification of numerous phrases that render the claims vague, indefinite or awkwardly worded.

Claims 1-6 are amended to more clearly express the present invention consistently with the specification and figures. Applicant has attempted to address each of the terms or phrases identified by the examiner, in most cases by either adopting the examiner's suggested language or by eliminating the term or phrases.

Amended claim 1 sets forth a method comprising the steps of providing a tubular member of an appropriate length, forming a curvilinear bottom end of the tubular member to define a bottom section aperture, forming a neck base and a neck body at a top end of the tubular member, and forming an outer conoidal hem and an inner conoidal hem on the tubular member proximate to the neck base.

Referring to the specification as amended, it can be understood that the “semifinished product” recited in claim 1 and the subsequent claims simply refer to intermediate forms (or intermediate products) of the tubular member. However, in the interest of clarity, the semifinished and finished product references have been eliminated from the claims and reference is simply made to forming the various recited elements of the tubular member.

Applicant notes that the specification has been amended to clarify that the tubular member is formed into the various “semifinished” and “finished” products as can be clearly understood with reference to both the original specification and the original figures.

Claim 4 is amended to further identify the female dies as a first female die, a second female die, and so forth to avoid confusion in the dependent claims (and particularly in claim 5) which refer back to a particular female die.

In view of the amended claims, it is respectfully submitted that claims 1-6 are sufficiently clear and definite to particularly point out and distinctly claim the present invention. Accordingly, withdrawal of the rejection is requested.

Rejection of claims 1-3 under 35 U.S.C. § 102(b)

Claims 1-3 presently stand rejected as being anticipated by O’Connell et al (U.S. 5,743,646). This rejection is respectfully traversed for at least the following reasons.

According to the present invention (as set forth generally by both claims 1 and 4), a tubular member is provided with a curvilinear bottom end defining a bottom section aperture. A neck base and a neck body are formed at a top end of the tubular member, and

an outer conoidal hem and an inner conoidal hem are formed on the tubular member proximate to the neck base.

It is respectfully submitted that O'Connell fails to disclose or suggest all of the elements set forth in claim 1 (and claim 4), and therefore O'Connell cannot be construed to disclose or suggest a method that includes steps of forming each of these features.

O'Connell discloses a hollow tube 58 having a closed end 62. While the closed end 62 is round (curvilinear), there is no teaching or suggestion of a curvilinear bottom end defining a bottom section aperture since O'Connell teaches a *closed* end 62.

Referring to O'Connell's figure, the hollow tube 58 is entirely cylindrical except for the rounded bottom. Accordingly, O'Connell's hollow tube 58 lacks the neck base, the neck body, and the conoidal hems, and therefore lacks any teaching or suggestion of the steps of forming these elements as required by the claims.

While the examiner refers to O'Connell's elements 12 and 14 as the claimed neck base and neck body, and O'Connell's element 36 as the claimed conoidal hems, it must be noted and appreciated that none of O'Connell's elements 12, 14, and 36 are part of (or even formed on) the hollow tube 58.

O'Connell's housing 12 cannot itself be considered as a temperature sensing tube formed according to the claimed method. Further, there is no teaching or suggestion of the housing 12 having a curvilinear bottom end defining a bottom section aperture, and accordingly there is no teaching or suggestion of a fabrication step of the housing 12 wherein a curvilinear bottom end of a tubular member is formed to define a bottom section aperture.

Moreover, it is respectfully submitted that O'Connell's threads 36 cannot be construed as the claimed inner and outer conoidal hems. The term "hem" is defined by the *Merriam Webster Online Dictionary* (<http://www.merriam-webster.com>), as:

1 : a border of a cloth article doubled back and stitched down

2 : RIM, MARGIN.

Referring to Figs. 3, 4, and 10 of the present application, it can be seen that the inner outer conoidal hems 42, 41 correspond to this definition in that they comprise portions of the tubular member that are doubled back on one another to form a conoidal rim about the tubular member.

The term “conoidal” simply means cone-shaped or cone-like. Again referring to Figs. 3, 4, and 10 of the present application, the cone-like shape of the conoidal hems 42, 41 (and the rim that they form together) is readily apparent.

O’Connell provides no teaching or suggestion of any structure corresponding to the claimed conoidal hems of the present invention. O’Connell’s threads 36 are not a “hem” and would not be so construed by persons of ordinary skill in the art as such.

For at least these reasons, it is respectfully submitted that O’Connell does not disclose or suggest each and every element as set forth in claim 1. Therefore, it is respectfully submitted that claim 1, along with claims 2 and 3 which depend from claim 1, are allowable over the cited references, and withdrawal of the rejection is requested.

Claims 4-6

The examiner has noted that no art rejections have been applied to claims 4-6, in view of the indefiniteness issues discussed above. It is respectfully submitted that, as discussed above, the indefiniteness issues with respect to claims 4-6 have been overcome.

Further, applicant notes that claims 4-6 refer not only to the elements of the temperature sensing tube referenced in claim 1, but additionally refer to particular female and punching dies used to form the particular elements of the temperature sensing tube (also, thereby, reciting in particular that the tubular member is formed into the temperature sensing tube by a die forming process).

It is respectfully submitted that claims 4-6 set forth a process that is novel and non-obvious, and therefore claims 4-6 are allowable.

Conclusion


In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1-6 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

Respectfully submitted,

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